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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,170	04/09/2004	Akihiko Chiba	108421-00096	8399
4372 7590 10/01/2007 ARENT FOX LLP 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036			EXAMINER MORILLO, JANEL COMBS	
			ART UNIT 1742	PAPER NUMBER
			NOTIFICATION DATE 10/01/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DCIPDocket@arentfox.com  
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## Office Action Summary

Application No.

10/821,170

Applicant(s)

CHIBA ET AL.

Examiner

Janelle Combs-Morillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 5-10 and 17-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11-16 and 23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/10/2007 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-4, 11-16, 23-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original specification does not appear to teach, implicitly or explicitly, the amended limitation of "was not subjected to wire drawing". The absence of (a multiplicity of) process step(s) from the examples of the invention does not provide enablement for a preferred embodiment specifically excluding said process step(s).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 11-16, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stinson (US 5,891,191).

Stinson teaches a Co-Cr-Mo alloy fine wire with a diameter between 0.025-0.500 mm (25-500 $\mu$ m) for an implantable medical device (column 3 line 32), said alloy comprising (in wt%): 26-31% Cr, 4-8% Mo, <2% Ni, balance Co (column 3 lines 42-45).

Concerning the degree of roundness (cl. 1, 4, 15, 16), Stinson teaches that filaments #12 (wires) of said Co alloy are substantially homogeneous in cross section (see Fig. 3, column 5 lines 5-7). Concerning the concentration ratio of Mo, Cr, or Co (cl. 1-3), Stinson teaches the composition of said wires are also substantially homogeneous (column 5 lines 9-10). Because the prior art teaches an overlapping Co-Cr-Mo alloy composition formed into a fine wire, and wherein the composition of said wires are substantially homogeneous (Stinson at column 5 lines 9-10), it is held that substantially the same properties, such as Mo concentration ratio (directly related to the homogeneity of the composition) or internal structure phase components (directly related to the alloying ranges- see for instance, a phase diagram), are expected to occur. Therefore it is held that Stinson meets the instant limitations of degree of roundness and concentration ratio.

Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility.

With regard to the process steps (including the amended process limitation of “not subjected to wire drawing”), it is well settled that a product-by-process claim defines a product, and that when the prior art discloses a product substantially the same as that being claimed, differing only in the manner by which it is made, the burden falls to applicant to show that any process steps associated therewith result in a product materially different from that disclosed in the prior art. See MPEP 2113, *In re Brown* (173 USPQ 685) and *In re Fessman* (180 USPQ 524) *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292.

Because Stinson teaches a Co alloy wire with alloying ranges that overlap or touch the boundary of the presently claimed alloying ranges, it is held that Stinson has created a prima facie case of obviousness of the presently claimed invention.

Concerning claims 11-14 and 23-26, Stinson teaches said alloy wire is woven to form a lattice structure (column 4 lines 8-11, Fig.1), thereby forming a stranded cable with a tubular cross section. Though Stinson does not specify a planar profile/body, it would have been within the scope of Stinson to form a planar edge of said stranded cable. The limitation “planar body”

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does not patentably distinguish the claimed Co-Cr-Mo alloy woven wire from the prior art's Co-Cr-Mo alloy wire woven into a substantially tubular body (see MPEP 2144.03).

Concerning claim 15, which mentions said Co alloy wire has an internal structure of gamma phase or epsilon phase only, or both of them only, the examiner asserts that "products of identical chemical composition can not have mutually exclusive properties." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). A chemical composition and its properties are inseparable. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). Therefore, if the prior art teaches a substantially identical chemical structure, the properties applicant discloses and/or claims (such as alloy phases) are necessarily present. See MPEP 2112.01.

When the Examiner has established a *prima facie* obviousness, the burden then shifts to the applicant to rebut. *In re Dillon*, 919 F.2d 688, 692, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (en banc). Rebuttal may take the form of "a comparison of test data showing that the claimed compositions possess unexpectedly improved properties... that the prior art does not have, that the prior art is so deficient that there is no motivation to make what might otherwise appear to be obvious changes, or any other argument.. that is pertinent." *Id.* at 692-93; USPQ2d 1901.

Applicant has not directed the examiner to specific evidence of unexpected results/properties that are clearly distinct from the prior art of record, or criticality of the instant claimed range (wherein said results must be fully commensurate in scope with the instantly claimed ranges, etc. see MPEP 716.02 d).

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6. Claims 1-4, 11-16, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stinson (US 5,891,191) in view of JP 2002-363675A (JP'675). Stinson is discussed in paragraphs above.

Concerning the instant range of Mo, as stated above, Stinson teaches a maximum of 8wt%. However, JP'675 teaches higher Mo (up to 12%, see abstract, etc) is useful for corrosion and abrasion resistance (see [0004]). It would have been obvious to one of ordinary skill in the art to increase the Mo content of the Co-Cr-Mo alloy taught by Stinson, because JP'675 teaches higher Mo (up to 12%, see abstract, etc) is useful for corrosion and abrasion resistance (see [0004]).

For other limitations of the instant claims, see discussion of Stinson in paragraphs above.

#### ***Response to Amendment/Arguments***

7. In the response filed on July 10, 2007, applicant amended claims 1 and 15, and submitted various arguments traversing the rejections of record.

8. Applicant's argument that the present invention is allowable over the prior art of record because the instant invention is processed by a different process compared to the prior art's product by process, or that claims 1 and 15 set forth structural features distinguishing over the prior art's product by process has not been found persuasive. Applicant has not clearly shown the instant product by process is materially different from the prior art's overlapping Co-Cr-Mo alloy wire.

9. The declaration under 37 CFR 1.132 filed May 21, 2007 is insufficient to overcome the rejection of claims 1-4, 11-16, 23-26 based upon Stinson or Stinson in view of JP'675 as set

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forth in the last Office action because: though applicant has shown a bending degree is considerably improved for alloys of the invention no 1 and 2 of Table 1, the applied prior art clearly teaches an overlapping diameter of wire and composition with said alloys of the invention no 1 and 2 of Table 1, it is unclear that an identical bending degree and Mo concentration ratio are not also expected to result (the results in Table 1 show a proportional relationship of diameter to Mo concentration ratio and bending degree. It is unclear that the overlapping composition and overlapping diameter taught by the prior art would not also be expected to have the same improved Mo conc. ratio and bending degree). Applicant has not clearly shown specific unexpected results with respect to the prior art of record or criticality of the instant claimed range (wherein said results must be fully commensurate in scope with the instantly claimed ranges, etc. see MPEP 716.02 d).

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCM

September 24, 2007

ROY KING  
PATENT EXAMINER  
10/821,170